

Received

PAGE: 1

**RAW SEQUENCE LISTING
PATENT APPLICATION US/08/846,658A**

1642
~~CPN~~ H 9
DATE: 06/09/98
TIME: 08:43:23

INPUT SET: S26559.raw

This Raw Listing contains the General Information Section and up to the first 5 pages.

SEQUENCE LISTING

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**RAW SEQUENCE LISTING
PATENT APPLICATION US/08/846,658A**

DATE: 06/09/98
TIME: 08:43:24

INPUT SET: S26559.raw

(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:
TCCAGATGTT AACTGCTCAC

(2) INFORMATION FOR SEQ ID NO:2:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 23 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:
CAGGGGCCAG TGGATGGATA GAC

(2) INFORMATION FOR SEQ ID NO:3:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 9 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:
Leu Glu Ile Asn Arg Thr Val Ala Ala
1 5

(2) INFORMATION FOR SEQ ID NO:4:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 943 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

**RAW SEQUENCE LISTING
PATENT APPLICATION US/08/846,658A**

DATE: 06/09/98
TIME: 08:43:27

INPUT SET: S26559.raw

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100
101      (ix) FEATURE:
102          (A) NAME/KEY: CDS
103          (B) LOCATION: 18..722
104
105      (ix) FEATURE:
106          (A) NAME/KEY: mat_peptide
107          (B) LOCATION: 84..722
108
109
110      (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:
111
112      GAATTCCCAA AGACAAA ATG GAT TTT CAA GTG CAG ATT TTC AGC TTC CTG      50
113          Met Asp Phe Gln Val Gln Ile Phe Ser Phe Leu
114          -22       -20            -15
115
116      CTA ATC AGT GCC TCA GTC ATA ATA TCC AGA GGA CAA ATT GTT CTC ACC      98
117          Leu Ile Ser Ala Ser Val Ile Ile Ser Arg Gly Gln Ile Val Leu Thr
118          -10        -5             1           5
119
120      CAG TCT CCA GCA ATC ATG TCT GCA TCT CCA GGG GAG AAG GTC ACC ATG      146
121          Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly Glu Lys Val Thr Met
122          10         15            20
123
124      ACC TGC AGT GCC AGC TCA AGT GTA AGT TAC ATG AAC TGG TAC CAG CAG      194
125          Thr Cys Ser Ala Ser Ser Val Ser Tyr Met Asn Trp Tyr Gln Gln
126          25         30            35
127
128      AAG TCA GGC ACC TCC CCC AAA AGA TGG ATT TAT GAC ACA TCC AAA CTG      242
129          Lys Ser Gly Thr Ser Pro Lys Arg Trp Ile Tyr Asp Thr Ser Lys Leu
130          40         45            50
131
132      GCT TCT GGA GTC CCT GCT CAC TTC AGG GGC AGT GGG TCT GGG ACC TCT      290
133          Ala Ser Gly Val Pro Ala His Phe Arg Gly Ser Gly Ser Gly Thr Ser
134          55         60            65
135
136      TAC TCT CTC ACA ATC AGC GGC ATG GAG GCT GAA GAT GCT GCC ACT TAT      338
137          Tyr Ser Leu Thr Ile Ser Gly Met Glu Ala Glu Asp Ala Ala Thr Tyr
138          70         75            80           85
139
140      TAC TGC CAG CAG TGG AGT AGT AAC CCA TTC ACG TTC GGC TCG GGG ACA      386
141          Tyr Cys Gln Gln Trp Ser Ser Asn Pro Phe Thr Phe Gly Ser Gly Thr
142          90         95            100
143
144      AAG TTG GAA ATA AAC CGG GCT GAT ACT GCA CCA ACT GTA TCC ATC TTC      434
145          Lys Leu Glu Ile Asn Arg Ala Asp Thr Ala Pro Thr Val Ser Ile Phe
146          105        110           115
147
148      CCA CCA TCC AGT GAG CAG TTA ACA TCT GGA GGT GCC TCA GTC GTG TGC      482
149          Pro Pro Ser Ser Glu Gln Leu Thr Ser Gly Gly Ala Ser Val Val Cys
150          120        125           130
151
152      TTC TTG AAC AAC TTC TAC CCC AAA GAC ATC AAT GTC AAG TGG AAG ATT      530

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RAW SEQUENCE LISTING
PATENT APPLICATION US/08/846,658ADATE: 06/09/98
TIME: 08:43:28

INPUT SET: S26559.raw

153 Phe Leu Asn Asn Phe Tyr Pro Lys Asp Ile Asn Val Lys Trp Lys Ile
154 135 140 145
155
156
157 GAT GGC AGT GAA CGA CAA AAT GGC GTC CTG AAC AGT TGG ACT GAT CAG 578
158 Asp Gly Ser Glu Arg Gln Asn Gly Val Leu Asn Ser Trp Thr Asp Gln
159 150 155 160 165
160
161 GAC AGC AAA GAC AGC ACC TAC AGC ATG AGC AGC ACC CTC ACG TTG ACC 626
162 Asp Ser Lys Asp Ser Thr Tyr Ser Met Ser Ser Thr Leu Thr Leu Thr
163 170 175 180
164
165 AAG GAC GAG TAT GAA CGA CAT AAC AGC TAT ACC TGT GAG GCC ACT CAC 674
166 Lys Asp Glu Tyr Glu Arg His Asn Ser Tyr Thr Cys Glu Ala Thr His
167 185 190 195
168
169 AAG ACA TCA ACT TCA CCC ATT GTC AAG AGC TTC AAC AGG AAT GAG TGT 722
170 Lys Thr Ser Thr Ser Pro Ile Val Lys Ser Phe Asn Arg Asn Glu Cys
171 200 205 210
172
173 TAGAGACAAA GGTCTTGAGA CGCCACCACC AGCTCCCAGC TCCATCCTAT CTTCCCTTCT 782
174
175 AAGGTCTTGG AGGCTTCCCC ACAAGCGCTT ACCACTGTTG CGGTGCTCTA AACCTCCTCC 842
176
177 CACCTCCTTC TCCTCCTCCT CCCTTCCTT GGCTTTATC ATGCTAATAT TTGCAGAAAA 902
178
179 TATTCAATAA AGTGAGTCTT TGCCTTGAAA AAAAAAAAAA A 943
180
181
182 (2) INFORMATION FOR SEQ ID NO:5:
183
184 (i) SEQUENCE CHARACTERISTICS:
185 (A) LENGTH: 235 amino acids
186 (B) TYPE: amino acid
187 (D) TOPOLOGY: linear
188
189 (ii) MOLECULE TYPE: protein
190
191 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:
192
193 Met Asp Phe Gln Val Gln Ile Phe Ser Phe Leu Leu Ile Ser Ala Ser
194 -22 -20 -15 -10
195
196 Val Ile Ile Ser Arg Gly Gln Ile Val Leu Thr Gln Ser Pro Ala Ile
197 -5 1 5 10
198
199 Met Ser Ala Ser Pro Gly Glu Lys Val Thr Met Thr Cys Ser Ala Ser
200 15 20 25
201
202 Ser Ser Val Ser Tyr Met Asn Trp Tyr Gln Gln Lys Ser Gly Thr Ser
203 30 35 40
204
205 Pro Lys Arg Trp Ile Tyr Asp Thr Ser Lys Leu Ala Ser Gly Val Pro

INPUT SET: S26559.raw

206 45 50 55
207
208 Ala His Phe Arg Gly Ser Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile
209 60 65 70
210
211 Ser Gly Met Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp
212 75 80 85 90
213
214
215 Ser Ser Asn Pro Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Asn
216 95 100 105
217
218 Arg Ala Asp Thr Ala Pro Thr Val Ser Ile Phe Pro Pro Ser Ser Glu
219 110 115 120
220
221 Gln Leu Thr Ser Gly Gly Ala Ser Val Val Cys Phe Leu Asn Asn Phe
222 125 130 135
223
224 Tyr Pro Lys Asp Ile Asn Val Lys Trp Lys Ile Asp Gly Ser Glu Arg
225 140 145 150
226
227 Gln Asn Gly Val Leu Asn Ser Trp Thr Asp Gln Asp Ser Lys Asp Ser
228 155 160 165 170
229
230 Thr Tyr Ser Met Ser Ser Thr Leu Thr Leu Thr Lys Asp Glu Tyr Glu
231 175 180 185
232
233 Arg His Asn Ser Tyr Thr Cys Glu Ala Thr His Lys Thr Ser Thr Ser
234 190 195 200
235
236 Pro Ile Val Lys Ser Phe Asn Arg Asn Glu Cys
237 205 210
238
239 (2) INFORMATION FOR SEQ ID NO:6:
240
241 (i) SEQUENCE CHARACTERISTICS:
242 (A) LENGTH: 1570 base pairs
243 (B) TYPE: nucleic acid
244 (C) STRANDEDNESS: single
245 (D) TOPOLOGY: linear
246
247 (ii) MOLECULE TYPE: cDNA
248
249
250 (ix) FEATURE:
251 (A) NAME/KEY: CDS
252 (B) LOCATION: 41..1444
253
254 (ix) FEATURE:
255 (A) NAME/KEY: mat_peptide
256 (B) LOCATION: 98..1444
257
258

PAGE: 1

SEQUENCE VERIFICATION REPORT
PATENT APPLICATION **US/08/846,658A**

DATE: 06/09/98
TIME: 08:43:32

INPUT SET: S26559.raw

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Original Text